REMARKS

Attached hereto is a marked-up version of the changes made to the claims by the current amendment. The attached page is captioned "Version with markings to show changes made."

Applicants respectfully request entry of the present amendment.

If the Examiner contemplates other action, or if a telephone conference would expedite allowance of the claims, Applicants invite the Examiner to contact the undersigned at (650) 843-7352 or (650) 621-8581.

Applicants believe that no fee is due with this communication. However, if the USPTO determines that a fee is due, the Commissioner is hereby authorized to charge Deposit Account No. **09-0108. This form is enclosed in duplicate.**

Respectfully submitted,

INCYTE GENOMICS, INC.

Date: Jun 18, 2001.

Terence P. Lo, Ph.D.
Limited Recognition (37 C.F.R. § 10.9(b)) attached
Direct Dial Telephone: (650) 621-8581

Date: 18 June 2001

Richard C. Ekstrom
Reg. No. 37,027
Direct Dial Telephone: (650) 843-7352

3160 Porter Drive
Palo Alto, California 94304
Phone: (650) 855-0555
Fax: (650) 849-8886

VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS:

Claims 13-18 and 23-41 have been canceled.

Claims 2 and 21 have been amended as follows:

2. (Twice Amended) A substantially purified, naturally occurring polypeptide [variant of human integral membrane protein] having at least 90% amino acid identity to SEQ ID NO:1.

21. (Twice Amended) A purified polypeptide comprising an immunogenic fragment of the [amino acid sequence of SEQ ID NO:1] protein of claim 1.

New claims 42-57 have been added:

42. (New) An isolated polypeptide selected from the group consisting of:

a) a polypeptide comprising the amino acid sequence of SEQ ID NO:1,

b) a polypeptide comprising a naturally occurring amino acid sequence at least 90% identical to the amino acid sequence of SEQ ID NO:1, and

c) an immunogenic fragment of a polypeptide having the amino acid sequence of SEQ ID NO:1.

43. (New) An isolated polypeptide of claim 42 comprising the amino acid sequence of SEQ ID NO:1.

44. (New) An isolated polypeptide of claim 42 comprising a naturally occurring amino acid sequence at least 90% identical to the amino acid sequence of SEQ ID NO:1.

45. (New) An isolated polypeptide of claim 42 comprising a naturally occurring amino acid sequence at least 95% identical to the amino acid sequence of SEQ ID NO:1.

46. (New) A method for producing a polypeptide of claim 42, the method comprising:

a) culturing a cell under conditions suitable for expression of the polypeptide, wherein said cell is transformed with a recombinant polynucleotide, and said recombinant polynucleotide comprises a promoter sequence operably linked to a polynucleotide encoding the polypeptide of claim 42, and

b) recovering the polypeptide so expressed.

47. (New) An isolated antibody which specifically binds to a polypeptide of claim 42.

48. (New) A composition comprising a polypeptide of claim 42 and a pharmaceutically acceptable excipient.

49. (New) A composition comprising a polypeptide of claim 43 and a pharmaceutically acceptable excipient.

50. (New) A composition comprising a polypeptide of claim 44 and a pharmaceutically acceptable excipient.

51. (New) A composition comprising a polypeptide of claim 45 and a pharmaceutically acceptable excipient.

52. (New) A method for screening a compound for effectiveness as an agonist of a polypeptide of claim 42, the method comprising:

a) exposing a sample comprising a polypeptide of claim 42 to a compound, and

b) detecting agonist activity in the sample.

53. (New) A method for screening a compound for effectiveness as an antagonist of a polypeptide of claim 42, the method comprising:

a) exposing a sample comprising a polypeptide of claim 42 to a compound, and

b) detecting antagonist activity in the sample.

54. (New) A method of screening for a compound that specifically binds to the polypeptide of claim 42, said method comprising the steps of:

a) combining the polypeptide of claim 42 with at least one test compound under suitable conditions, and

b) detecting binding of the polypeptide of claim 42 to the test compound, thereby identifying a compound that specifically binds to the polypeptide of claim 42.

55. (New) A method of screening for a compound that modulates the activity of the polypeptide of claim 42, said method comprising:

a) combining the polypeptide of claim 42 with at least one test compound under conditions permissive for the activity of the polypeptide of claim 42,

b) assessing the activity of the polypeptide of claim 42 in the presence of the test compound, and

c) comparing the activity of the polypeptide of claim 42 in the presence of the test compound with the activity of the polypeptide of claim 42 in the absence of the test compound, wherein a change in the activity of the polypeptide of claim 42 in the presence of the test compound is indicative of a compound that modulates the activity of the polypeptide of claim 42.

56. (New) A method of preparing a polyclonal antibody comprising:

a) immunizing an animal with a polypeptide of claim 43, or an immunogenic fragment thereof, under conditions to elicit an antibody response;

b) isolating antibodies from said animal; and

c) screening the isolated antibodies with the polypeptide, thereby identifying a polyclonal antibody which binds specifically to a polypeptide of claim 43.

57. (New) A method of making a monoclonal antibody comprising:

a) immunizing an animal with a polypeptide of claim 43, or an immunogenic fragment thereof, under conditions to elicit an antibody response;

b) isolating antibody producing cells from the animal;

c) fusing the antibody producing cells with immortalized cells to form monoclonal antibody-producing hybridoma cells;

d) culturing the hybridoma cells; and

e) isolating from the culture monoclonal antibody which binds specifically to a polypeptide of claim 43.